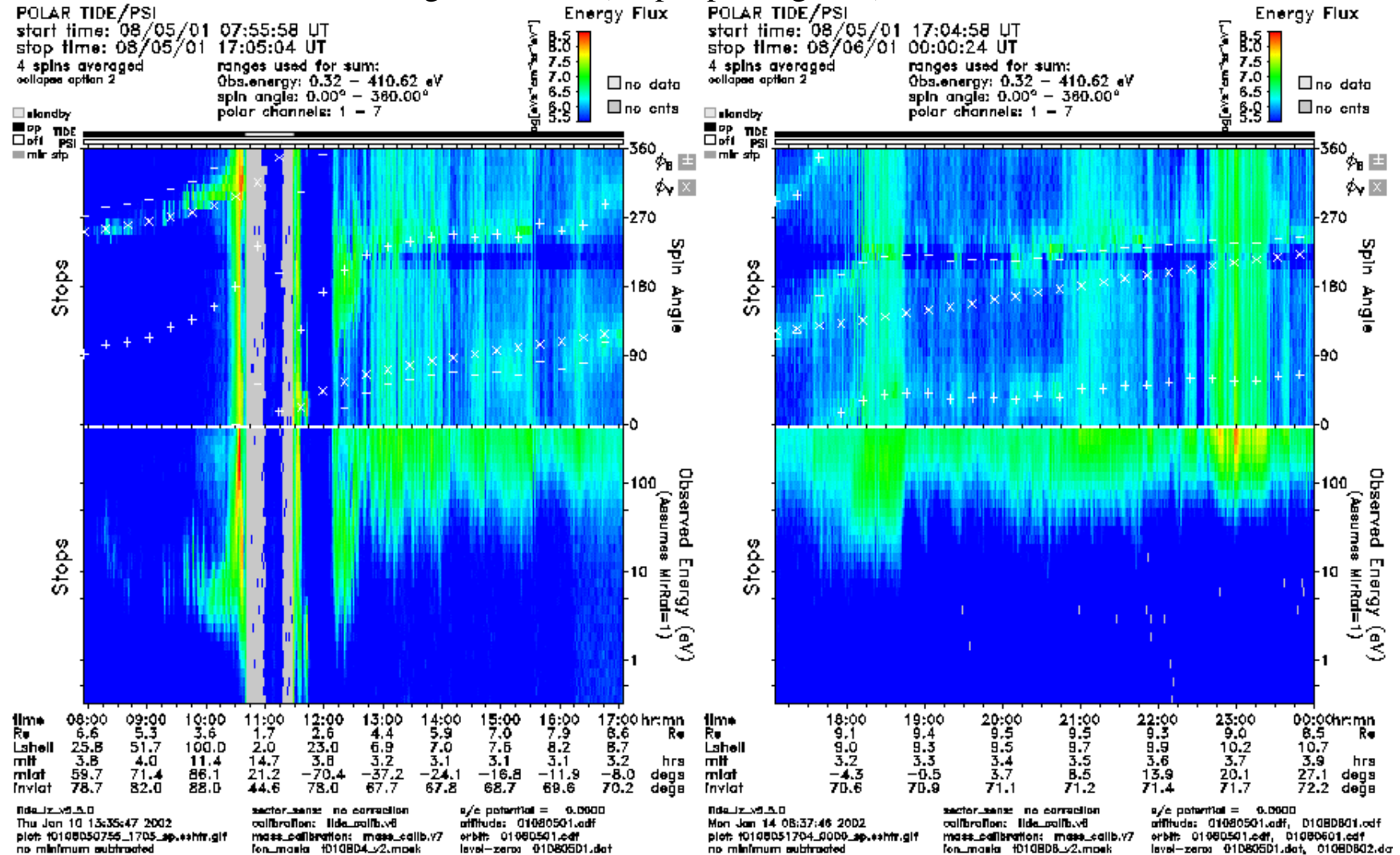
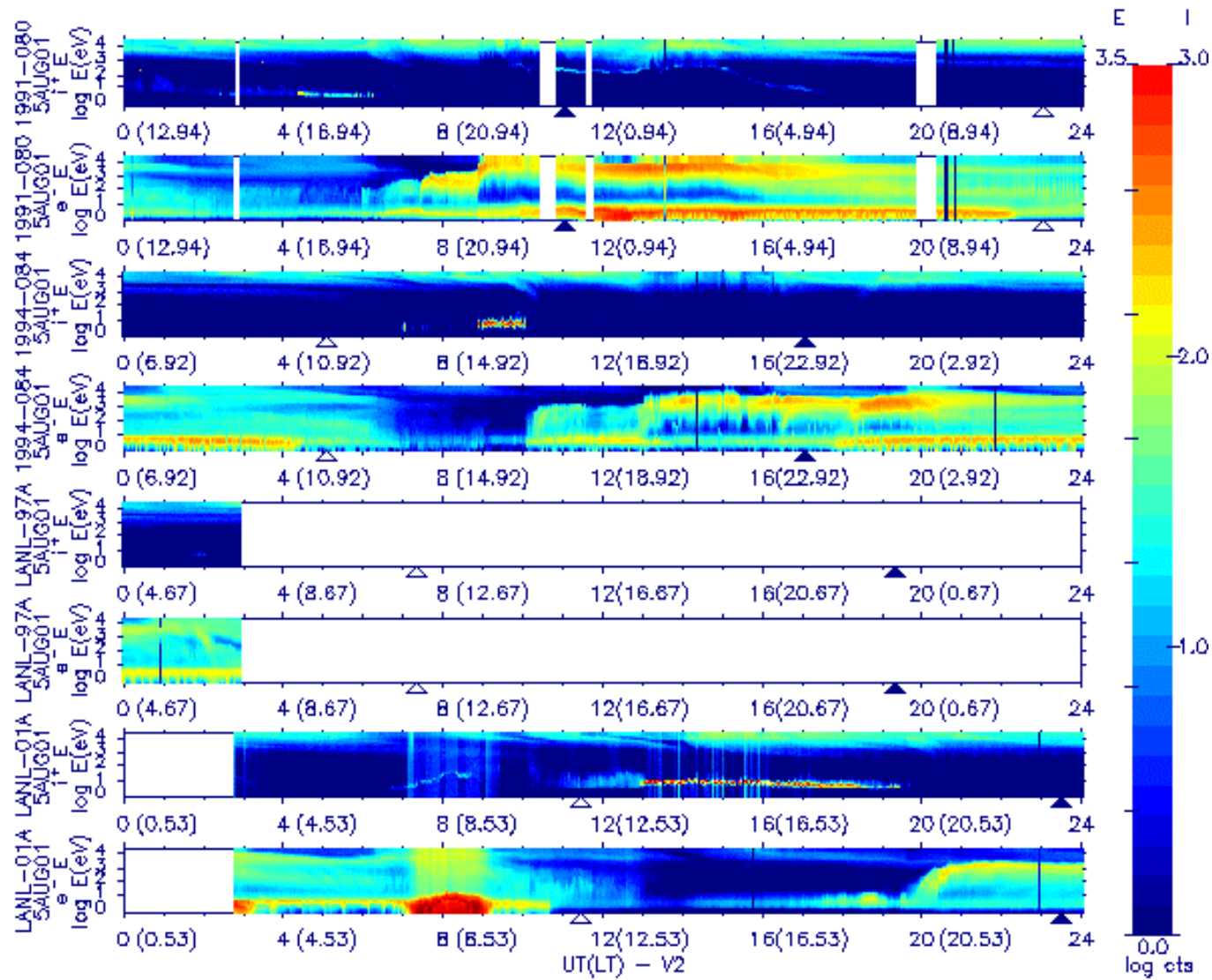


Post-midnight, Sub-keV, Field-Aligned Ions

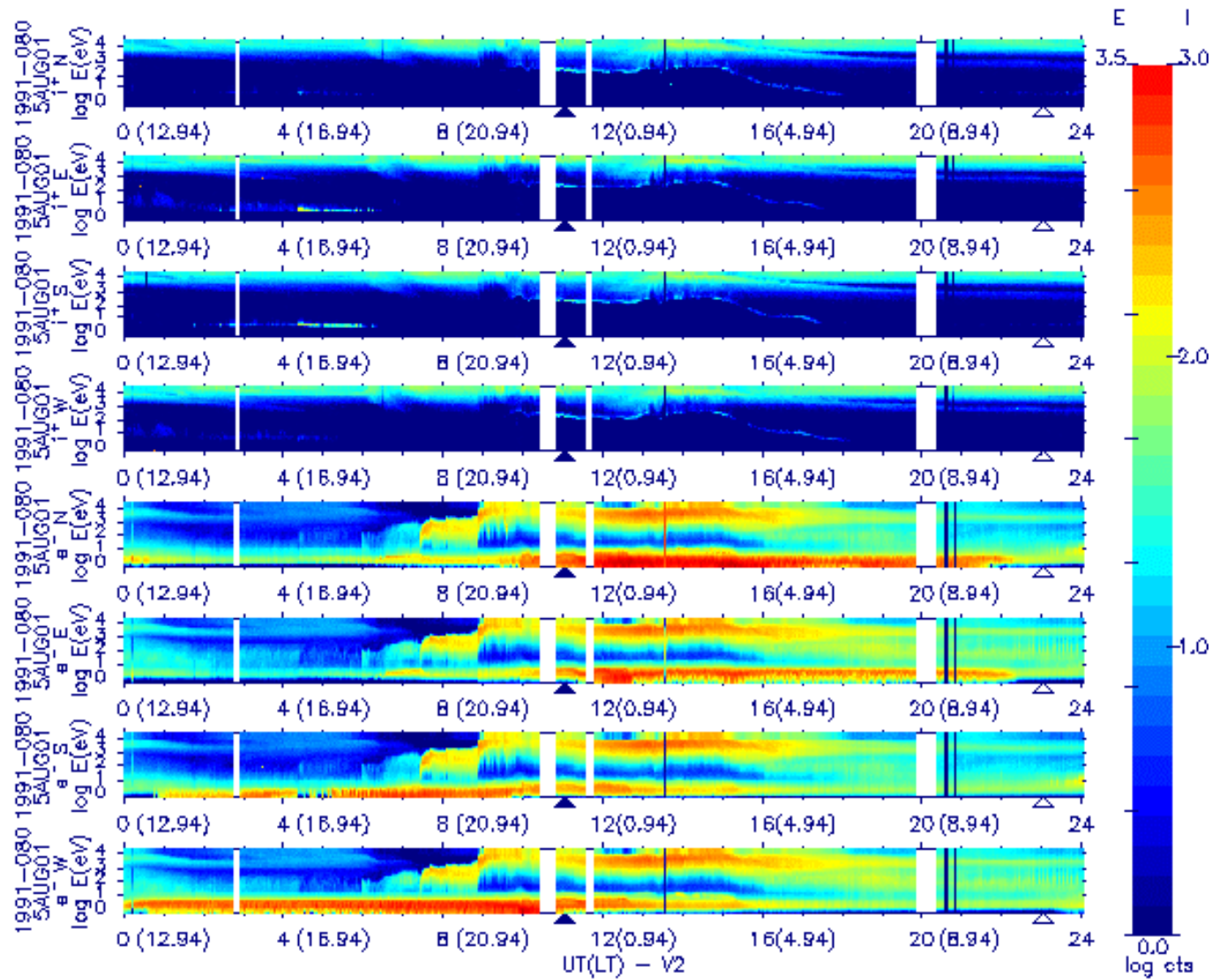
Polar-TIDE Observations: August 5, 2001 (Stops spectrograms)



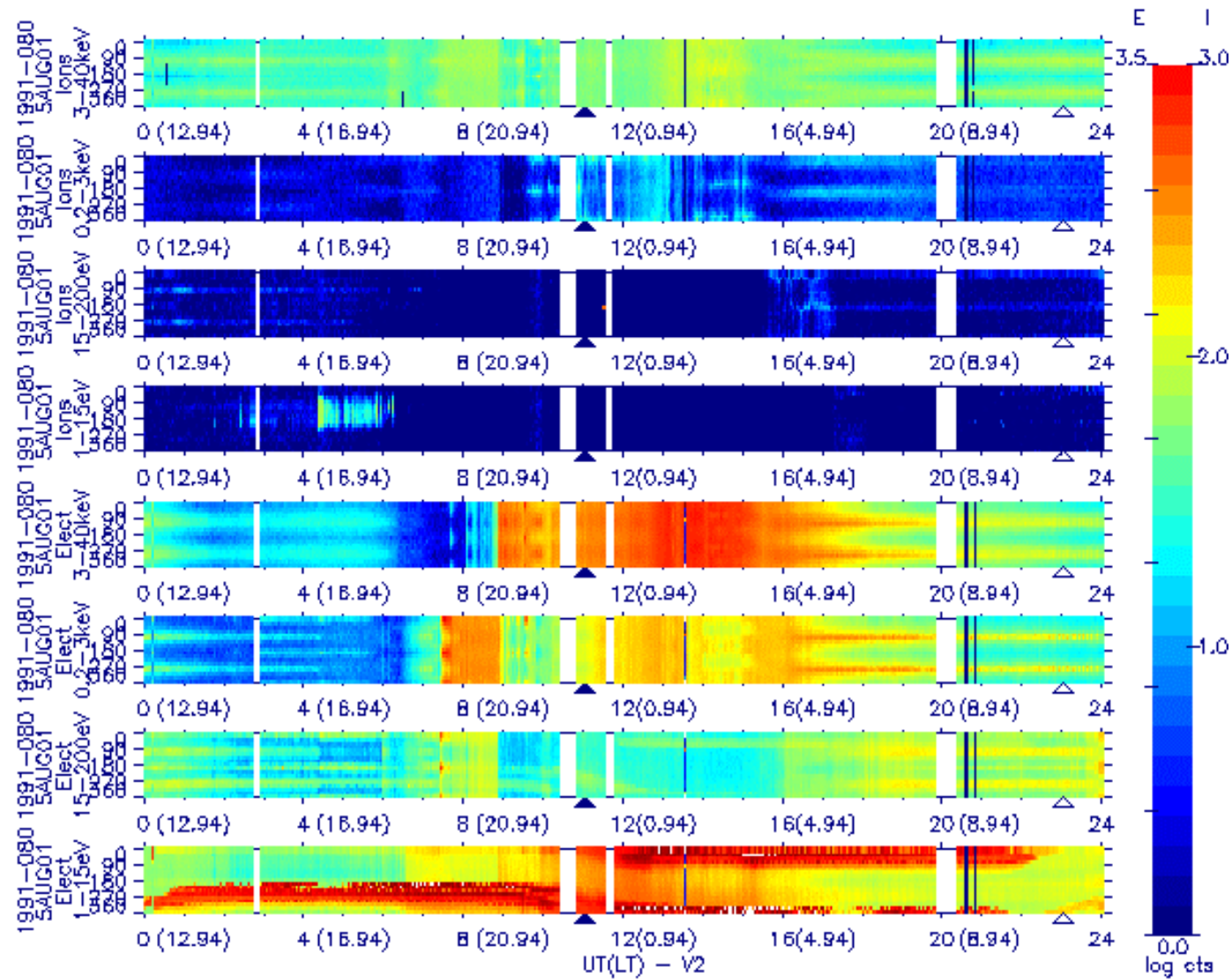
LANL-MPA Observations: August 5, 2001 (Energy spectrograms, all satellites)



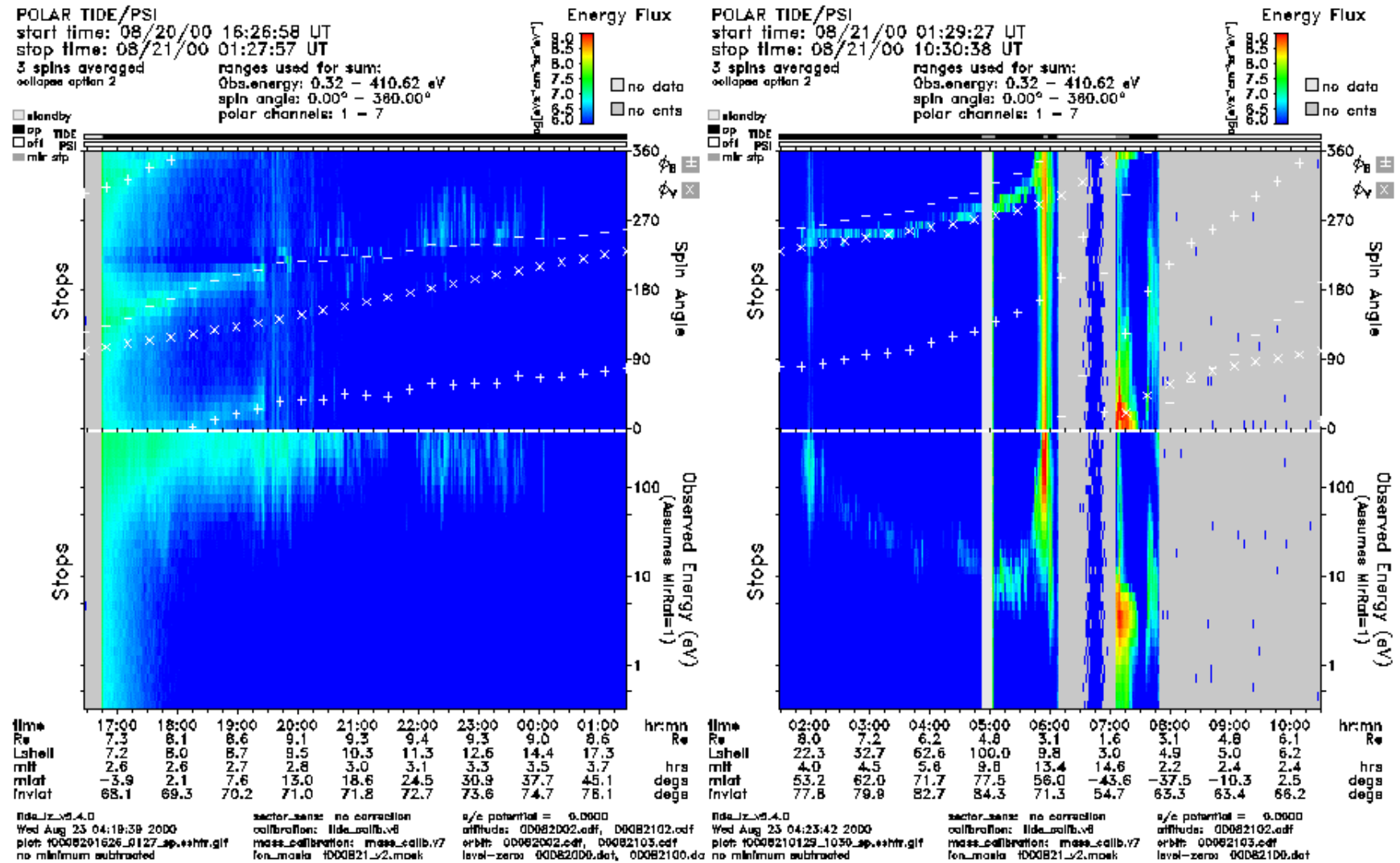
LANL-MPA Observations: August 5, 2001 (Energy spectrograms, satellite 1991-080)



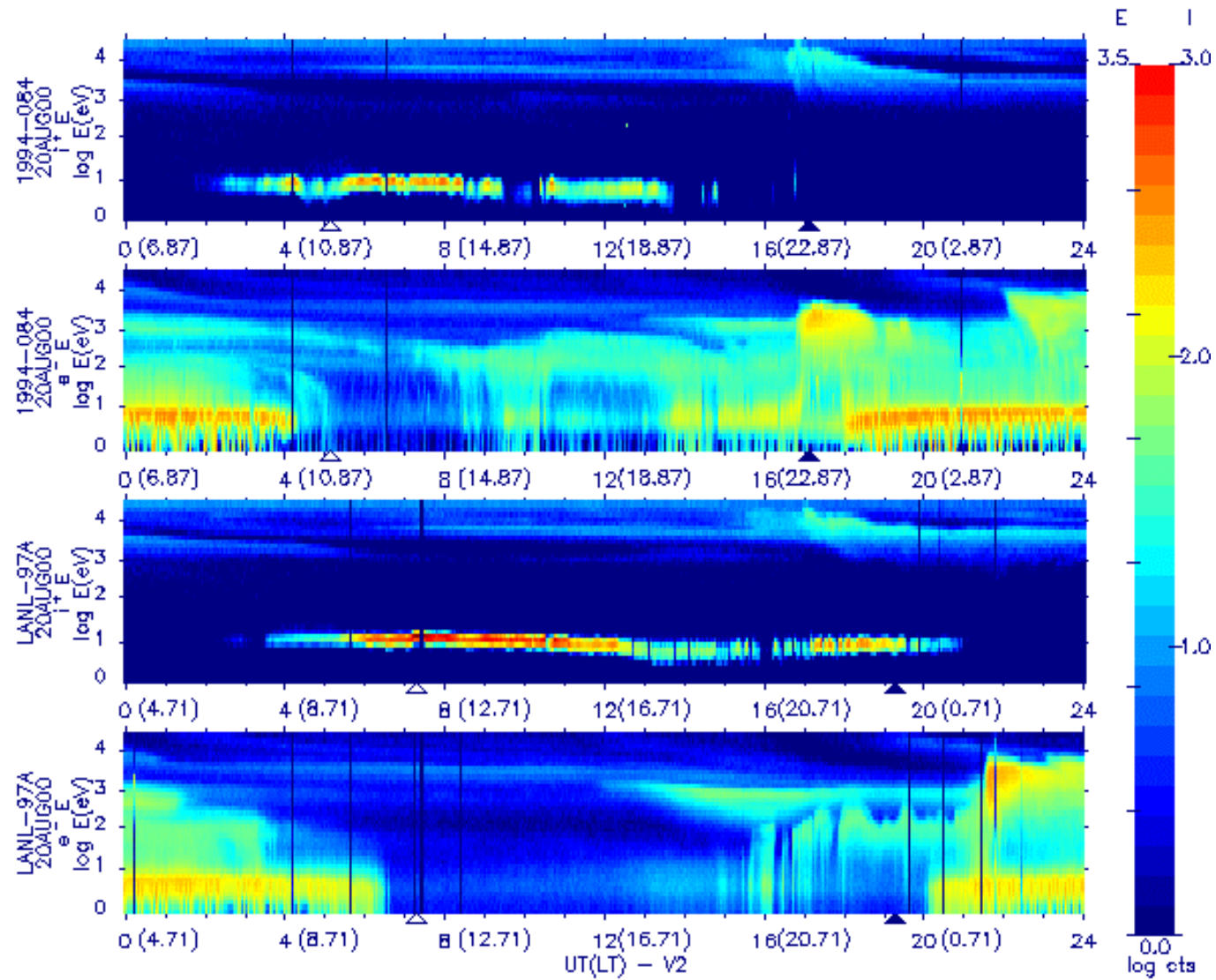
LANL-MPA Observations: August 5, 2001 (Azimuth spectrograms, satellite 1991-080)



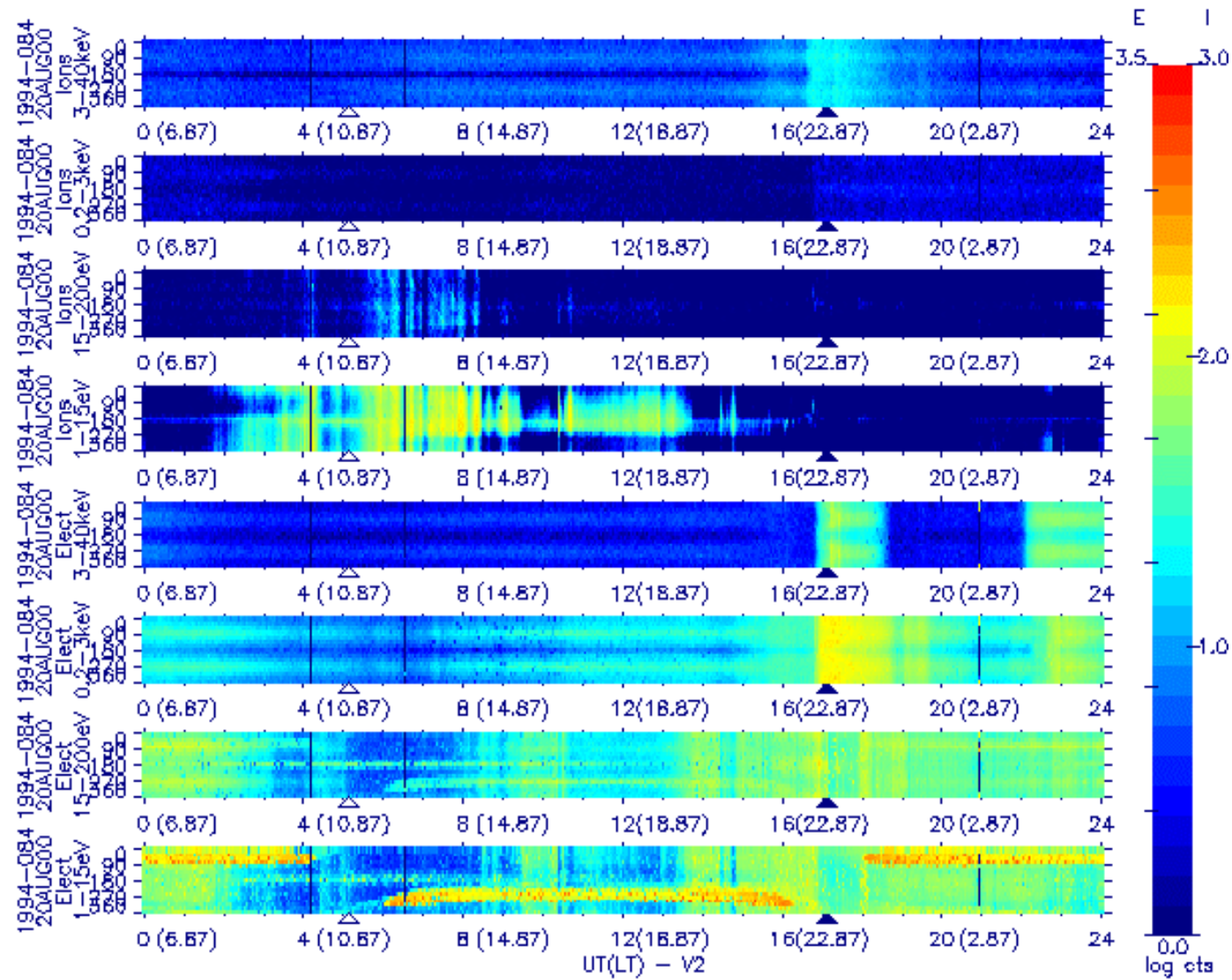
Polar-TIDE Observations: August 20, 2000 (Stops spectrograms)



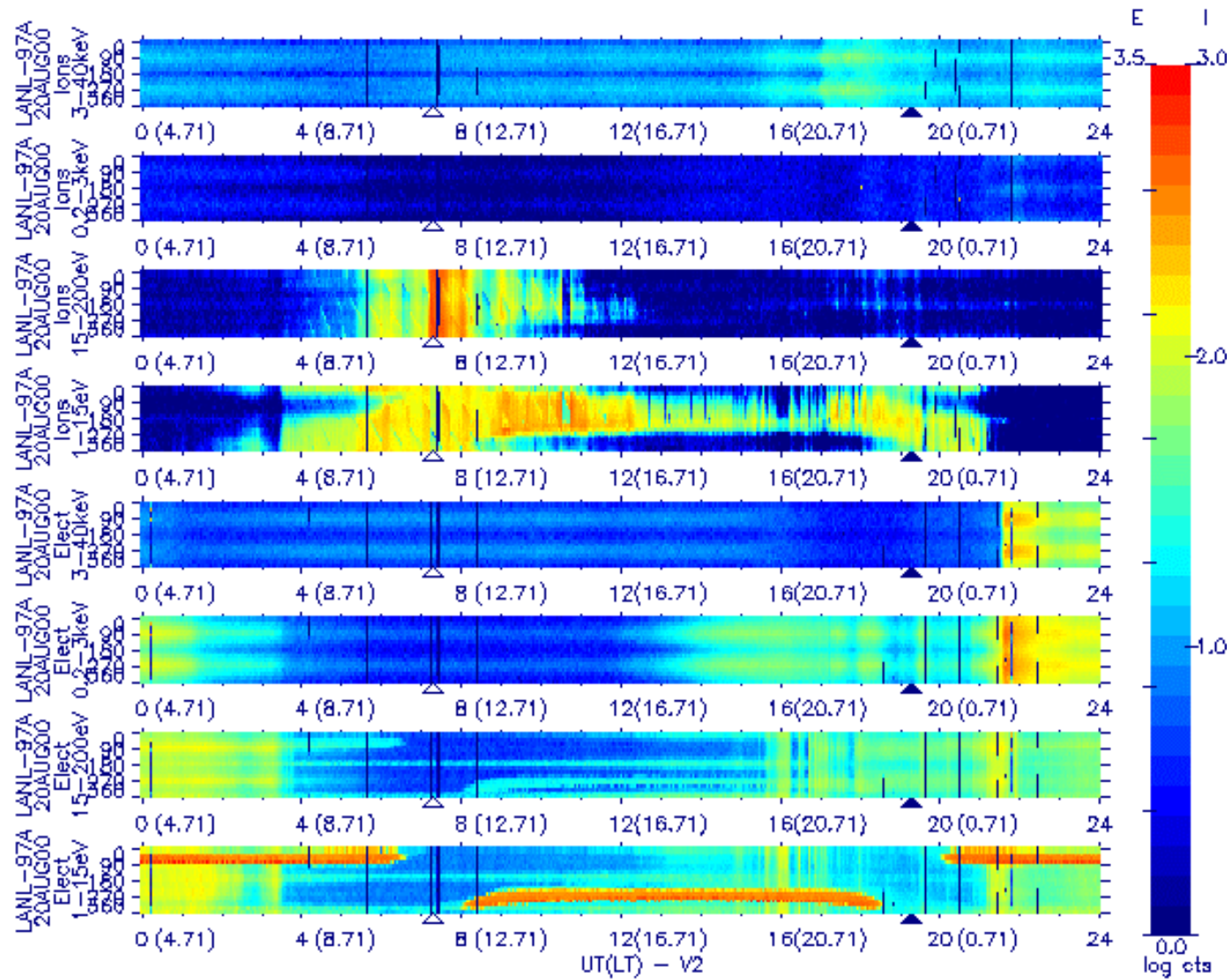
LANL-MPA Observations: August 5, 2001 (Energy spectrograms, all satellites)



LANL-MPA Observations: August 20, 2000 (Azimuth spectrograms, satellite 1994-084)



LANL-MPA Observations: August 20, 2000 (Azimuth spectrogram, satellite LANL-97A)



Polar-TIDE Observations: August 10, 2000 (Stops spectrograms)

POLAR TIDE/PSI

start time: 08/10/00 12:21:25 UT

stop time: 08/10/00 21:23:42 UT

3 spins averaged

collapse option 2

ranges used for sum:

Obs.energy: 0.32 - 410.62 eV

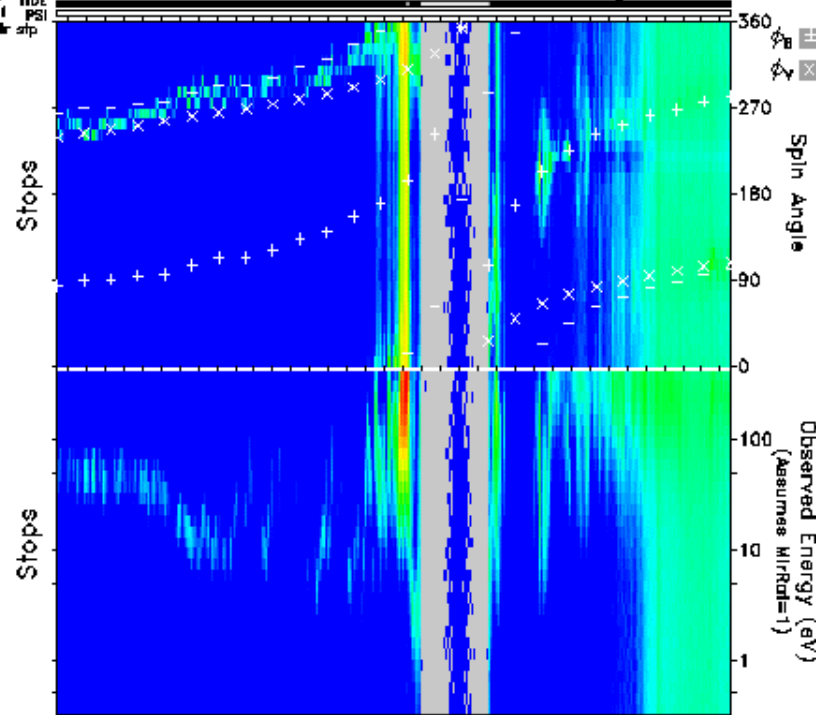
spin angle: 0.00° - 360.00°

polar channels: 1 - 7

standby
op TIDE
off PSI
mlr stop

Energy Flux

8.5
8.0
7.5
7.0
6.5
6.0
no data
no ents



time	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	hr:min
Re	7.9	7.1	6.0	4.7	2.9	1.6	3.2	4.9	6.2	Re
Lat	29.5	35.9	56.2	100.0	19.2	2.6	9.9	6.3	6.6	Lat
mlt	2.6	2.5	2.3	1.5	15.4	15.3	3.0	3.2	3.3	mlt
mlat	58.8	63.7	70.9	83.4	67.0	-36.2	-55.4	-28.7	-14.4	mlat
lmlat	79.4	80.4	82.3	86.8	76.8	51.9	71.5	66.5	67.1	lmlat

ndc_j2_v5.4.0

Sat Aug 12 04:33:45 2000

plot: 10005101221_2123.sp.ashtr.gif

no minimum subtracted

sector_sense: no correction

calibration: tide_calib.v8

mass_calibration: mass_calib.v7

len_mask: 1000808_2.mask

s/e potential = 0.0000

altitude: 00081000.edf

orbit: 00081000.edf

level-zero: 00081000.dat

POLAR TIDE/PSI

start time: 08/10/00 21:23:54 UT

stop time: 08/11/00 06:25:05 UT

3 spins averaged

collapse option 2

ranges used for sum:

Obs.energy: 0.32 - 410.62 eV

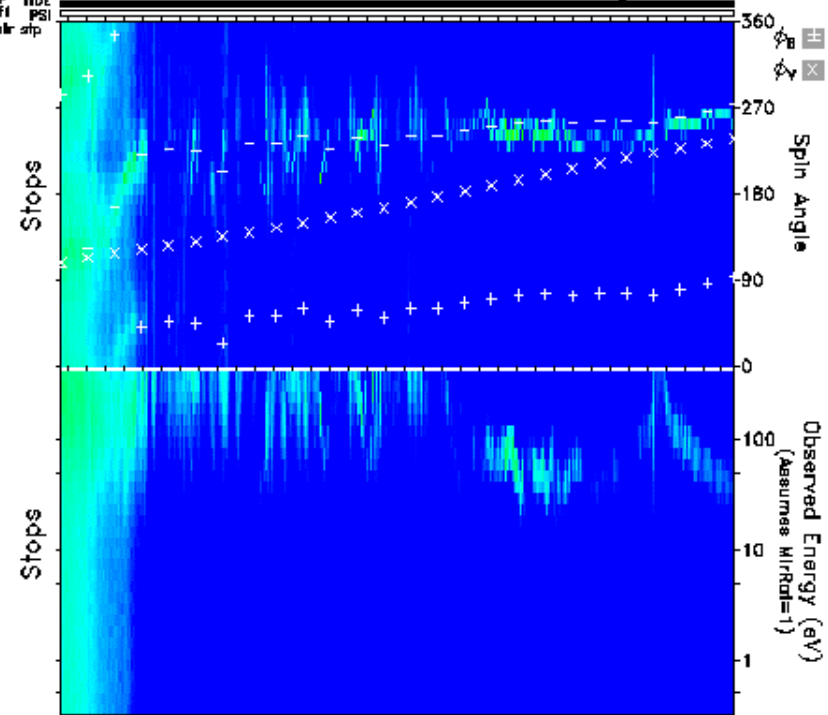
spin angle: 0.00° - 360.00°

polar channels: 1 - 7

standby
op TIDE
off PSI
mlr stop

Energy Flux

8.5
8.0
7.5
7.0
6.5
6.0
no data
no ents



time	22:00	23:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	hr:min
Re	7.3	8.1	8.6	9.1	9.3	9.4	9.3	9.0	8.6	Re
Lat	7.3	8.1	9.1	10.3	11.9	14.0	16.9	21.3	28.2	Lat
mlt	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	mlt
mlat	-4.0	4.7	12.7	20.2	27.6	34.9	42.1	49.2	56.4	mlat
lmlat	68.2	69.4	70.6	71.8	73.1	74.5	75.9	77.5	79.2	lmlat

ndc_j2_v5.4.0

Sun Aug 13 04:20:17 2000

plot: 10005101223_0625.sp.ashtr.gif

no minimum subtracted

sector_sense: no correction

calibration: tide_calib.v8

mass_calibration: mass_calib.v7

len_mask: 1000811_2.mask

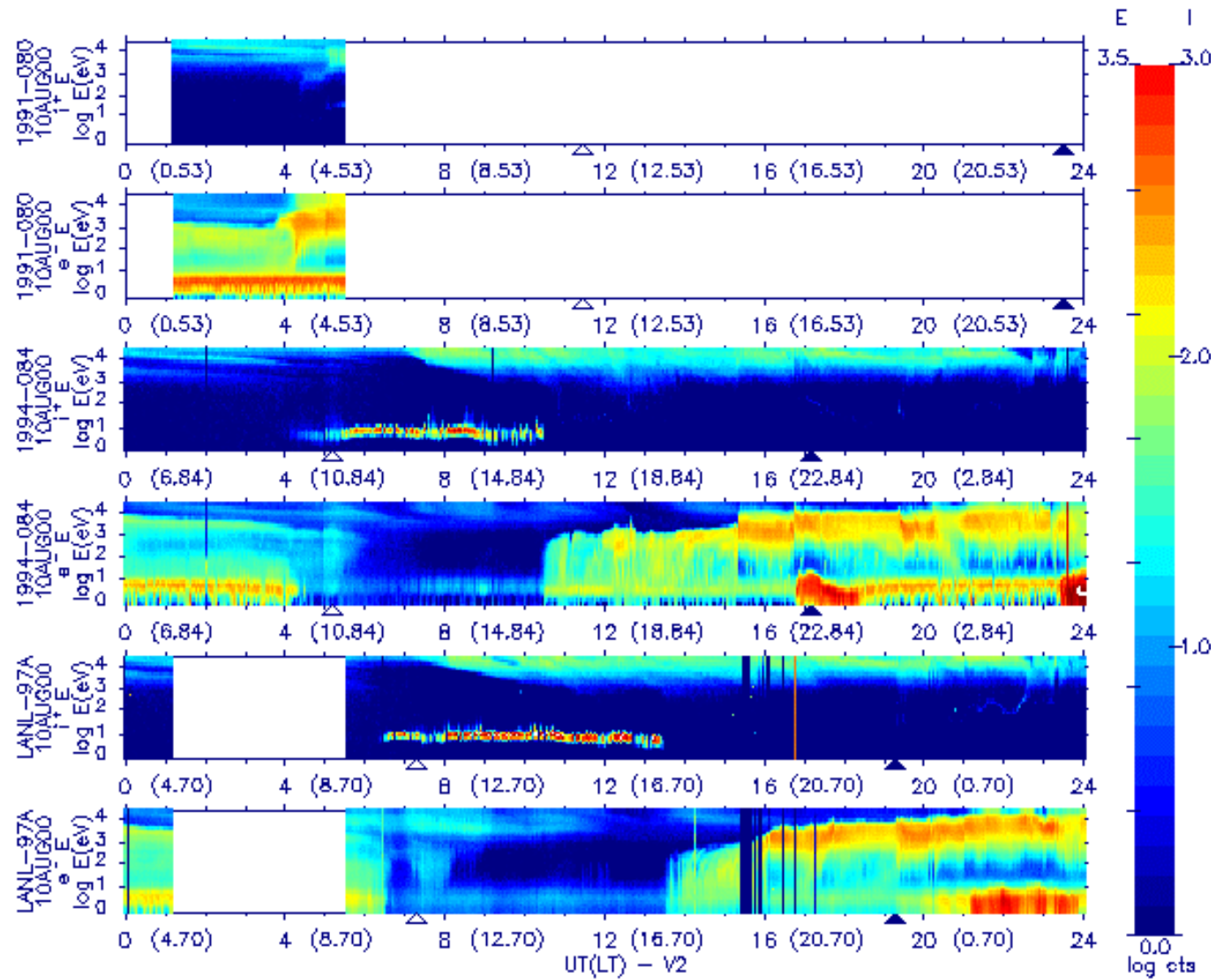
s/e potential = 0.0000

altitude: 00081000.edf, 00081100.edf

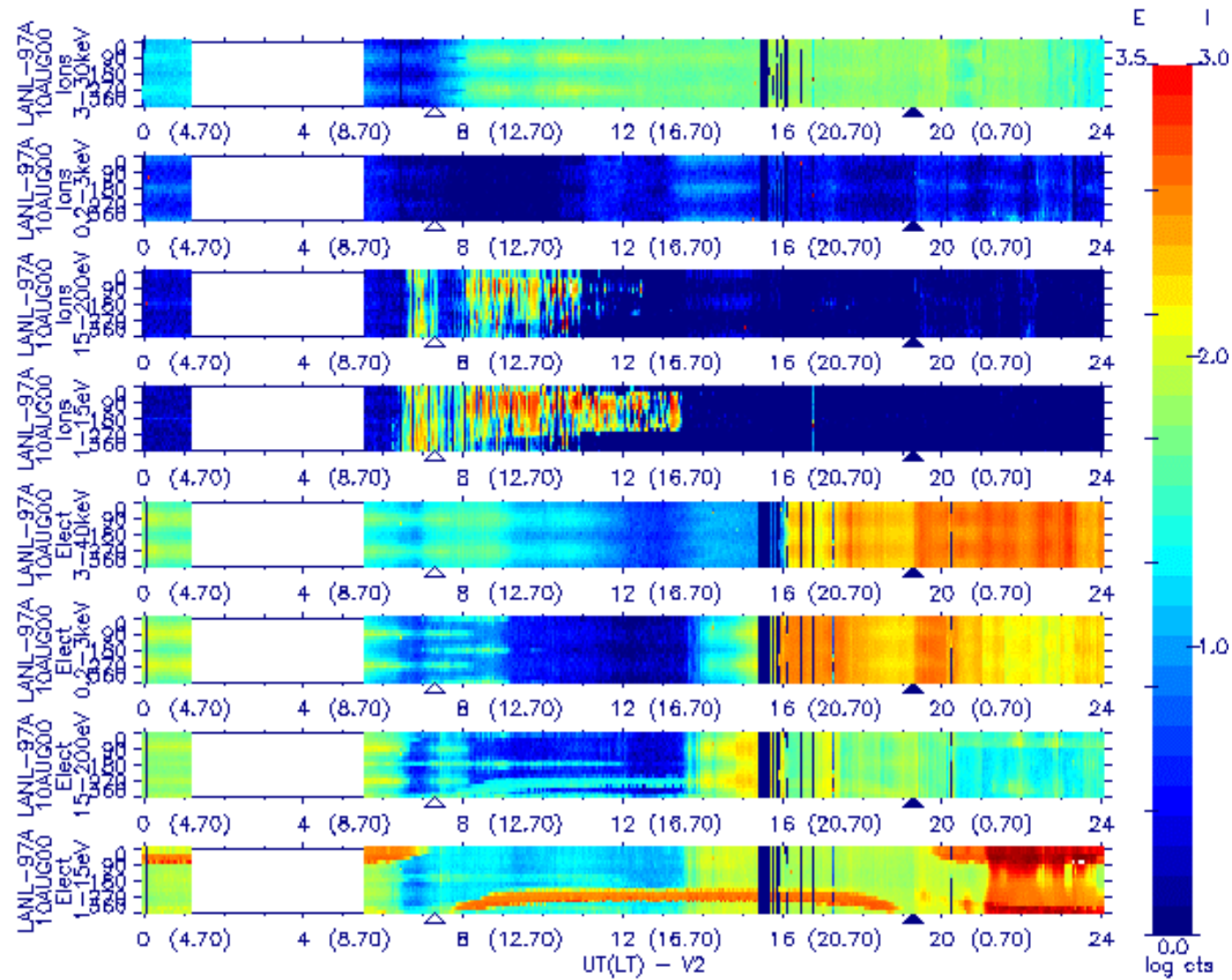
orbit: 00081000.edf, 00081100.edf

level-zero: 00081000.dat, 00081100.dat

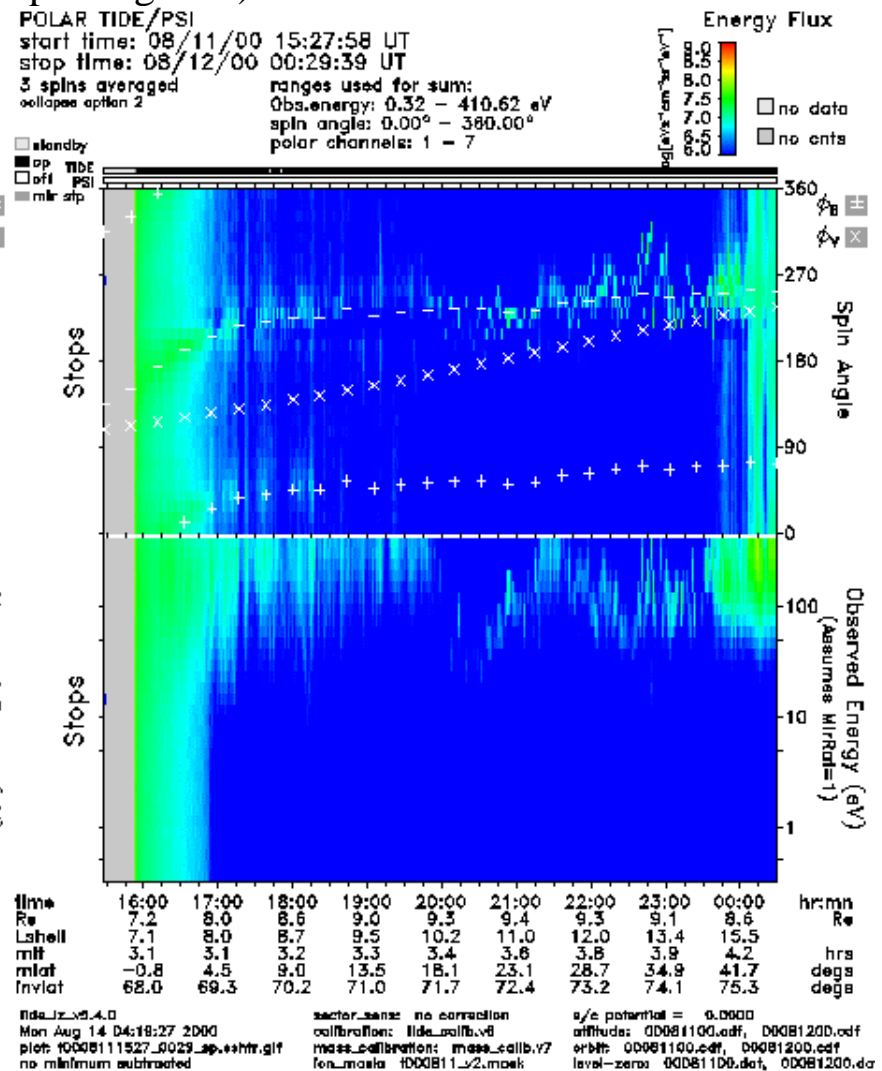
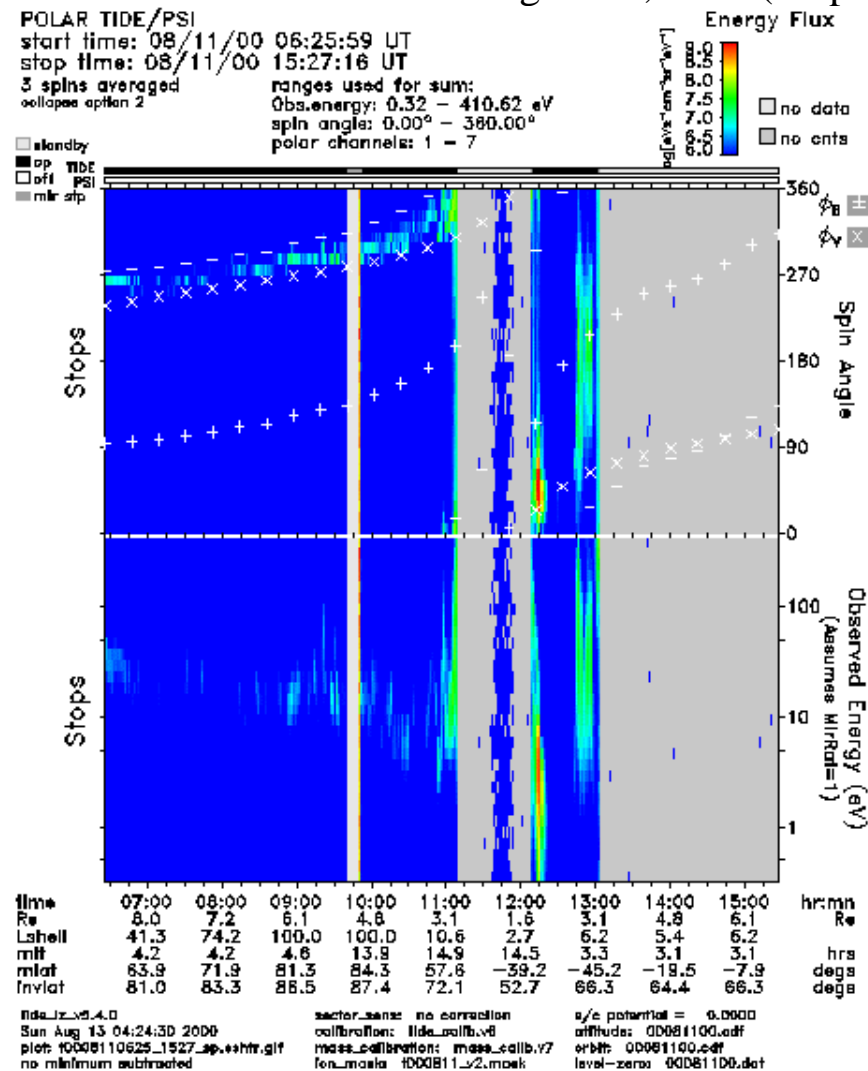
LANL-MPA Observations: August 10, 2000 (Energy spectrograms, all satellites)



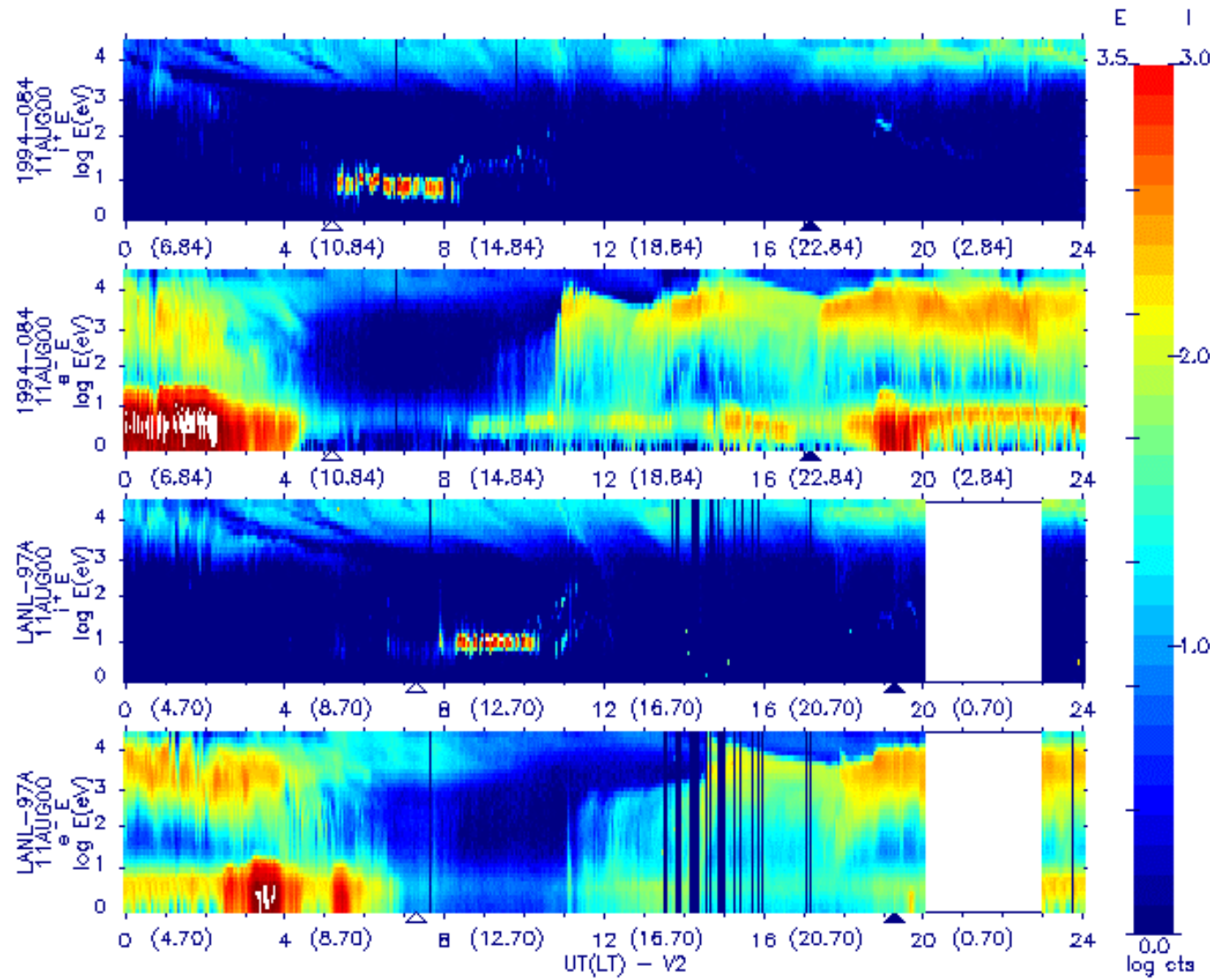
LANL-MPA Observations: August 10, 2000 (Azimuth spectrograms, satellite LANL-97A)



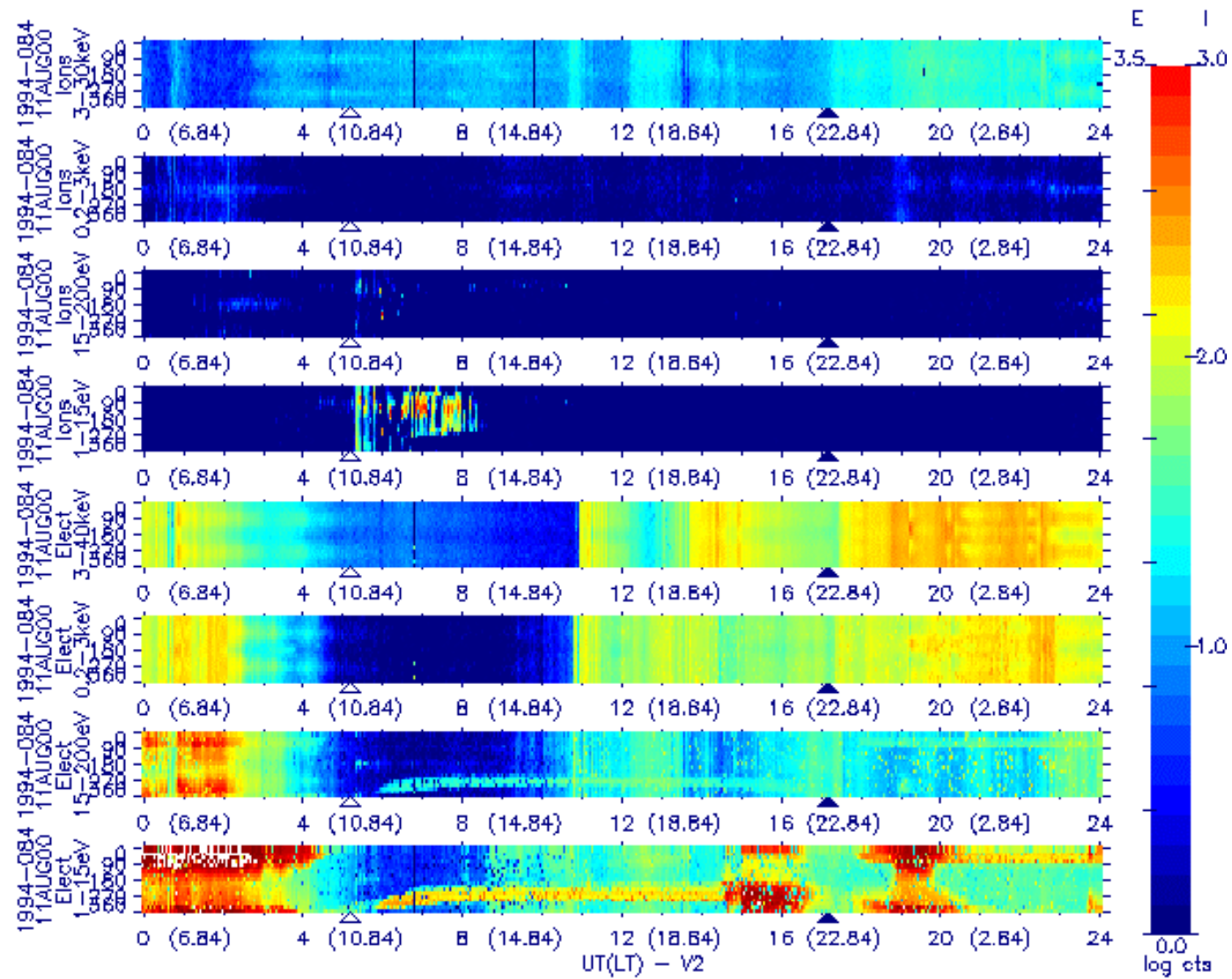
Polar-TIDE Observations: August 11, 2000 (Stops spectrograms)



LANL-MPA Observations: August 11, 2000 (Azimuth spectrograms, satellite 1994-084)



LANL-MPA Observations: August 11, 2000 (Azimuth spectrograms, satellite 1994-084)



Sub-keV, Field-Aligned Ions in the Post-midnight, Near-Earth Plasma Sheet: Survey of August 2000 and 2001

TIDE (02 to 04 LT)

Seen on nearly every pass for stretches of many hours

Intensity may flicker on a timescale of tens of minutes

Uni- or bi-directional flows, sometimes changing during a pass

Usually above 100 eV

Highly-field-aligned, within 10-20° of B-field direction

Often widens in pitch angle near the equator

LANL

Only seen between 00 LT and 06 LT

Not every day and not every satellite

Seen on about 40% of passes with data available (68/169)

Very narrow in energy, usually spike-like, between 100 and 1000 eV

Average energy often increases slightly and then drops with LT

Field-aligned bias, but it can be isotropic

Seems to be present on storm days, but then absent for a day or two after